

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

20. (Currently amended) An access method for an apparatus to gain access to a specific area ~~assigned to an area number~~ of a memory device, said specific area being assigned an area number, the method comprising the steps of:

~~the apparatus~~ first transmitting designation information from the apparatus to the memory device, said designation information designating an access area in the memory device, and including the area number of the access area, an access start offset in the specific area associated with the area number and a size of data to be accessed;

~~the apparatus~~ second transmitting verification information generated based on the designation information, together with a processing command, from the apparatus to the memory device, after first transmitting the designation information;

~~the memory device~~ verifying the verification information using the designation information at the memory device; and

~~the memory device~~ executing the processing command when the verification succeeds at the memory device.

21. (Currently amended) An access method for an apparatus to gain access to a specific area ~~assigned to an area number~~ of a memory device, said specific area being assigned an area number, the method comprising the steps of:

~~the apparatus~~ sharing, by the apparatus, a verification key with the memory device;

~~the apparatus~~ first transmitting designation information from the apparatus to the memory device, said designation information designating an access area in the memory device, and including the area number of the access area, an access start offset in the specific area associated with the area number and a size of data to be accessed;

~~the apparatus~~ second transmitting verification data obtained by encrypting the designation information using the verification key, together with a processing command, from the apparatus to the memory device, after first transmitting the designation information;

~~the memory device~~ verifying the verification data using the designation information and the verification key at the memory device; and

~~the memory device~~ executing the processing command when the verification succeeds at the memory device.

22. (Currently amended) An access method for an apparatus to gain access to a specific area ~~assigned to an area number~~ of a memory device, the method comprising the steps of:

~~the apparatus~~ sharing, by the apparatus, a verification key with the memory device;

~~the apparatus~~ requesting, by the apparatus, transmission of random numbers to the memory device;

~~the memory device~~ transmitting, by the memory device, random numbers to the apparatus;

~~the apparatus~~ first transmitting designation information from the apparatus to the memory device, said designation information designating an access area in the memory device, and including the area number of the access area, an access start offset in the specific area associated with the area number and a size of data to be accessed;

~~access and designating an access area of the memory device, to the memory device;~~

~~the apparatus~~ second transmitting verification data obtained by encrypting verification information including the random numbers and the designation information, together with a processing command, from the apparatus to the memory device, after first transmitting the designation information;

~~the memory device~~ verifying the verification data using the random numbers, the designation information and the verification key at the memory device; and

~~the memory device~~ executing the processing command when

the verification succeeds at the memory device.

23. (Currently amended) A memory device whose data of a specific area ~~assigned to an area number~~ is read and written by an apparatus, said specific area being assigned an area number, the memory device comprising;

- a processing command receiver that receives designation information including the area number, an access start offset in the specific area associated with the area number and a size of data to access and designating an area to access and receives verification information generated based on the designation information and a processing command including a command for read or write;

- a designation information verifier that performs verification processing on the verification information using the designation information;

- a storage area that stores data;

- a storage area access section that performs read or write from/in a designated area of the storage area according to the command for processing, when the verification processing succeeds;

- a data transmitter that transmits data read by the storage area access section to the apparatus; and

- a data receiver that receives data to write from the apparatus.

24. (Previously presented) The memory device according to claim 23, wherein, the designation information verifier generates random numbers in response to a request by the apparatus, holds the random numbers and transmits the random numbers to the apparatus.

25. (Previously presented) The memory device according to claim 24, wherein the designation information verifier performs the verification processing using the verification information and a verification key.

26. (Previously presented) The memory device according to claim 25, further comprising a verification key sharing section that shares the

verification key with the apparatus.

27. (Currently amended) An information apparatus that reads and writes data to a specific area ~~assigned to an area number~~ from/in a memory device, said specific area being assigned an area number, the information apparatus comprising:

a designation information determiner that determines designation information including an access start offset for reading and writing data from/in the specific area, a size of data for performing read and write and the area number and designating the access area;

a verification information generator that performs processing for generating verification information based on the designation information;

a processing command transmitter that transmits the designation information to the memory device and separately transmits the verification information and a processing command for reading or writing data;

a data transmitter that transmits data to the memory device when the processing command is write; and

a data receiver that receives data from the memory device when the processing command is read.

28. (Previously presented) The information apparatus according to claim 27, wherein the detection information verifier requests transmission of random numbers to the memory device and receives the random numbers from the memory device.

29. (Previously presented) The information apparatus according to claim 28, wherein the verification information generator performs the processing for generating the verification information using the designation information and a verification key.

30. (Previously presented) The information apparatus according to claim 29, further comprising a verification key sharing section that shares the verification key with the memory device.

31. (Currently amended) An access method for an apparatus to gain access to a

specific area assigned to an area number of a memory device, said specific area being assigned an area number, the method comprising:

~~the apparatus~~ first transmitting designation information from the apparatus to the memory device, said designation information designating an access area in the memory device, and including the area number of the access area, an access start offset in the specific area associated with the area number and a size of data to be accessed;

~~the apparatus~~ second transmitting verification data obtained by encrypting the designation information using the verification key, together with a processing command, from the apparatus to the memory device, after first transmitting the designation information;

~~the memory device~~ verifying the verification data using the designation information and the verification key at the memory device; and

~~the memory device~~ executing the processing command when the verification succeeds at the memory device.

32. (Currently amended) An access method for an apparatus to gain access: to a specific area assigned to an area number of a memory device, said specific area being assigned an area number, the method comprising the steps of:

~~the apparatus~~ requesting, by the apparatus, transmission of random numbers to the memory device;

~~the memory device~~ transmitting, by the memory device, device random numbers to the apparatus;

~~the apparatus~~ first transmitting designation information from the apparatus to the memory device, said designation information designating an access area in the memory device, and including the area number of the access area, an access start offset in the specific area associated with the area number and a size of data to be accessed;

~~the apparatus~~ second transmitting verification data obtained by encrypting the designation information using a verification key, together with a processing command, from the apparatus to the memory device, after first transmitting the designation information;

~~the memory device~~ verifying the verification data using the random numbers, the designation information, and the verification key at the memory device; and

~~the memory device~~ executing the processing command when the verification succeeds at the memory device.

33. (New) An access method according to claim 20, wherein the specific area is a security protection area to which an access from an outer apparatus is restricted.

34. (New) An access method according to claim 20, wherein the processing command is a command for reading out or writing a data in the specific area.